

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

Claim 1. (Currently Amended) A information terminal comprising:

~~a main terminal device comprising a voice synthesizer for voice-synthesizing voice-synthesis-subject data based on phonemic database having organized phoneme data extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data; and~~

a memory device for storing said voice-synthesis-subject data and said phonemic data, said phonemic data being constructed of sampled data of natural voice from real human, said memory device being detachable from said main terminal device,

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data stored in said memory device with said phonemic data stored in said memory device.

Claim 2. (Canceled)

Claim 3. (Original) The information terminal as recited in claim 1, wherein said main terminal device further comprises:

a voice output processor for delivering an output of said voice synthesizer to a speaker after removing an undesired noise from said output;

an operation unit for a user to input a command; and

a communication processor for accessing a server device over a network,

wherein said phonemic database includes sampled data of natural voice taken from human,

wherein, if the user selects a kind of said phonemic database and said voice-synthesis-subject data through said operation unit, said communication processor transfers information on the selected kind of said phonemic database and said selected voice-synthesis-subject data to said server device, and

wherein said voice synthesizer synthesizes phonetic sound with said phonemic database and said voice-synthesis-subject data transferred from said server device via the network.

Claim 4. (Currently Amended) A information terminal comprising:

a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data synthesizing phonetic sound using voice-synthesis-subject data and phonemic data constructed of phoneme according to a voice-synthesizing program stored in a storage unit;

~~a storage unit for storing said voice synthesizing program and said voice synthesis-subject data;~~

a memory device for storing said phonemic data, said memory device being detachable;

a memory device interface for exchanging data between said a memory device and said memory device interface; and

a communication processor for accessing a network,

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data stored in said memory device with said phonemic data stored in said memory device through said memory device interface,

~~wherein said memory device comprises:~~

~~a phonemic database storing said phonemic data; and~~

~~a terminal device interface for exchanging data between said memory device interface of said information terminal.~~

Claim 5. (Original) The information terminal as recited in claim 4, wherein said communication processor is capable of downloading at least one of said voice-synthesizing program, said phonemic data, and said voice-synthesis-subject data from a server device on the network.

Claim 6. (Current Amended) A information terminal comprising:

a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data ~~synthesizing phonetic sound using voice-synthesis-subject data and phonemic data constructed of phoneme~~ according to a voice-synthesizing program stored in a storage unit;

~~a storage unit for storing said voice synthesizing program;~~

a memory device storing said phonemic data and said voice-synthesis-subject data, said memory device being detachable;

a memory device interface for exchanging data between a memory device and said memory device interface; and

a communication processor for accessing a network,

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data stored in said memory device through said memory device interface with said phonemic data stored in said memory device through said memory device interface;

~~wherein said memory device comprises:~~

~~a phonemic database storing said phonemic data;~~

~~a voice-synthesis-subject data memory for storing said voice-synthesis-subject data; and~~

~~a terminal device interface for exchanging data between said memory device interface and said terminal device interface.~~

Claim 7. (Current Amended) A information terminal comprising:

a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data ~~synthesizing phonetic sound using voice-synthesis-subject data and phonemic data constructed of phoneme data, according to a voice-synthesizing program~~;

a storage unit for storing said voice-synthesizing program and said phonemic data;

a memory device storing said voice-synthesis-subject data, said memory device being detachable;

a memory device interface for exchanging data between a memory device and said memory device interface; and

a communication processor for accessing a network,
wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data stored in the memory with said phonemic data stored in said memory, said voice synthesizer being according to said voice-synthesizing program stored in a memory device through said memory device interface;

~~wherein said memory device comprises:~~

~~a voice-synthesis-subject data memory for storing said voice-synthesis-subject data; and~~

~~a terminal device interface for exchanging data between with said memory device interface.~~

Claim 8. (Currently Amended) An information terminal comprising:

a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data ~~synthesizing phonetic sound using voice-synthesis-subject data and phonemic data constructed of phoneme data~~ according to a voice-synthesizing program;

a storage unit for storing said voice-synthesizing program;

a memory device for storing said phonemic data, voice-synthesis-subject data, and a communication processor for accessing a network, said memory device being detachable; and

a memory device interface for exchanging data between said a memory device and said memory device interface,

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data stored in the memory with said phonemic data stored in said memory through said memory device interface, said voice synthesizer being according to said voice-synthesizing program in said storage unit,

~~wherein said memory device comprises:~~

~~a phonemic database for storing said phonemic data;~~

~~a voice-synthesis-subject data memory for storing said voice-synthesis-subject data;~~

~~a terminal device interface for exchanging data between said memory device interface; and~~

~~a communication processor for accessing a network.~~

Claim 9. (Original) The information terminal as recited in claim 8, further comprising a memory controller for downloading said voice-synthesizing program, said phonemic data, and said voice-synthesis-subject data from a server device on said network through said communication processor, and for transferring said downloaded voice-synthesis-subject data, phonemic data, and voice-synthesizing program to said storage unit via said terminal device interface and said memory device interface.

Claim 10. (Currently Amended) An information terminal comprising:

~~a storage unit for storing a voice-synthesizing program;~~

a memory device comprising a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data according to a voice-synthesizing program, voice-synthesizing program stored in said voice synthesizer;

a memory device interface for exchanging data between a memory device; and

a communication processor for accessing a network,

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data with said phonemic data

~~wherein said memory device comprises:~~

~~a voice synthesizer for synthesizing phonetic sound using voice-synthesis-subject data and phonemic data constructed of phoneme data according to said voice-synthesizing program, said voice synthesizer storing said voice-synthesizing program; and~~

~~a terminal device interface for exchanging data between said memory device interface.~~

Claim 11. (Original) The information terminal as recited in claim 10, wherein said memory device further comprises at least one of a voice-synthesis-subject database for storing said voice-synthesis-subject data, and a phonemic database for storing said phoneme data.

Claim 12. (Original) The information terminal as recited in claim 1, wherein one of said main terminal device and said memory device further comprises a voice-recording processor for a user to register a character voice, and

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data with said registered character voice.

Claim 13. (Original) The information terminal as recited in claim 1, wherein one of said main terminal device and said memory device further comprises a translation processor for translating said voice-synthesis-subject data into language desired by a user, and

wherein said speech synthesizer voice-synthesis said translated voice-synthesis-subject data.

Claim 14. (Original) The information terminal as recited in claim 13, wherein one of said main terminal device and said memory device further comprises a voice registering processor for the user to register character voice, and

wherein said voice synthesizer voice-synthesis said translated voice-synthesis-subject data with said registered character voice.

Claim 15. (Original) The information terminal as recited in claim 1,

wherein said main terminal device further comprises a communication processor for accessing a network, and for downloading only a part of said voice-synthesis-subject data desired by a user into one of said main terminal device and said memory device from a server device on said network, and said server device includes a download selector and storing said voice-synthesis-subject data.

Claim 16. (Original) The information terminal as recited in claim 1, wherein said voice-synthesis-subject data comprises text data.

Claim 17. (Original) The information terminal as recited in claim 1,

wherein said voice-synthesis-subject data comprises music data having musical score data and text data, and

wherein said voice synthesizer synthesize phonetic sound of said music data with predetermined character voice desired by a user when a user specifies said phonemic database and said music data.

Claim 18. (Original) The information terminal as recited in claim 1, wherein said voice synthesizer voice-synthesizes a certain character string in said voice-synthesis-subject data and outputs phonetic sound in other voice than voice of a character specified by a user.

Claim 19. (Original) The information terminal as recited in claim 1, wherein said voice-synthesizer voice-synthesize said voice-synthesis-subject data while inserting, in said voice-synthesis-subject data, a sound implying that phonetic sound being output is synthesized sound.

Claim 20. (Original) The information terminal as recited in claim 1,

wherein one of said main terminal device and said memory device further comprises a phonemic database selector for selecting said phonemic database, and

wherein said voice synthesizer voice-synthesize a portion of said voice-synthesis-subject data with character voice desired for the portion by a user.

Claim 21. (Original) The information terminal as recited in claim 20,

wherein one of said main terminal device and said memory device further comprises:

a voice registering processor for the user to register character voice;

a phonemic database selector for selecting said voice-synthesis-subject data and said phonemic database applied to said voice-synthesis-subject data; and

a storage unit for storing said voice-synthesis-subject data and an identification code for said selected phonemic database, and

wherein said voice synthesizer distinguishes phonemic database of voice character to be applied according to said identification code.

Claim 22. (Original) The information terminal as recited in claim 20,

wherein said voice-synthesis-subject data comprises music data having musical score and lyrics, and

wherein said voice synthesizer synthesize phonetic sound of said music data with voice of a predetermined character desired by the user when the user specifies said phonemic database and said music data.

Claim 23. (Original) The information terminal as recited in claim 1, wherein one of said main terminal device and said memory device further comprises a visual display processor for providing a visual display associated with said voice-synthesis-subject data.

Claim 25. (Original) The information terminal as recited in claim 1,

wherein said memory device inputs said voice-synthesis-subject data to said main terminal device, and

wherein said main terminal device further comprises at least one of a speaker and an earphone for producing phonetic sound synthesized by said voice synthesizer.

Claim 26. (Original) The information terminal as recited in claim 1, wherein said memory device comprises one of a memory card, an optical disk, and a magnetic disk.

Claim 27. (Original) A server device comprising:
a controller having a communication function with a network;
a voice synthesizer for extracting and linking phonemic data which is the most suitable to each of character data in voice-synthesis-subject data, and for delivering said phonemic data to a voice output processor in a terminal device;
a text data memory for storing said voice-synthesis-subject data; and
a phonemic database memory for storing a phonemic database constructed of sampled data of natural voice taken from real human,
wherein, when receiving information indicating a kind of phonemic database and said voice-synthesis-subject data from said terminal device, said voice synthesizer voice-synthesizes said voice-synthesis-subject data specified by the information with said phonemic database of the kind specified by the information, and
said controller transfers the voice-synthesized voice-synthesis-subject data to said terminal device over the network.

Claim 28. (Original) The server device as recited in claim 27, further comprising:
a musical-score-data memory for storing musical-score data; and
a music synthesizer for reading the musical-score data from said musical-score-data memory, for reading said voice-synthesis-subject data, for linking said musical-score data with synthesized sound as a pair, and for converting said linked musical-score data into a format reproducible by said terminal device.

Claim 29. (Original) The server device as recited in claim 27, further comprising a phonemic database selector for selecting said phonemic database,

wherein said voice synthesizer voice-synthesizes a portion of said voice-synthesis-subject data with voice of character desired for the portion by a user,

wherein said controller transfers said voice-synthesized voice-synthesis-subject data to said terminal device over the network, and

wherein said terminal device receives said voice-synthesized voice-synthesis-subject data and reproduces it into audible sound.

Claim 30. (Original) The server device as recited in claim 27, further comprising a data registering processor for correlating said voice-synthesis-subject data with user identification information provided by the user,

wherein said voice synthesizer voice-synthesizes said provided voice-synthesis-subject data,

wherein said controller transfers said voice-synthesized voice-synthesis-subject data to said terminal device over the network; and

said terminal device receives said voice-synthesized voice-synthesis-subject data and reproduces it into audible sound.

Claim 31. (Original) A reading system comprising:

a server device on a network, comprising a voice synthesizer, voice-synthesis-subject data, and phonemic database; and

a terminal device comprising a voice output unit,

wherein, if a user selects said voice-synthesis-subject data through said terminal device, said voice synthesizer voice-synthesizes said selected voice-synthesis-subject data with specified phonemic database,

wherein said server device delivers said synthesized voice-synthesis-subject data to said terminal device over the network, and

wherein said terminal device reproduces said synthesized voice-synthesis-subject data into audible sound.

Claim 32. (Original) The reading system as recited in claim 31,

wherein said server device further comprises a voice registering processor for the user to register character voice, and

wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data with said registered character voice.

Claim 33. (Original) The reading system as recited in claim 31,

wherein said server device further comprises a translation processor for translating said voice-synthesis-subject data into language desired by the user, and

wherein the user selects a phonemic database and a kind of language through said terminal device, and

wherein said voice synthesizer voice-synthesizes said translated voice-synthesis-subject data with said selected phonemic database.

Claim 34. (Original) The reading system as recited in claim 33,

wherein said server device further comprises a voice registering processor for the user to register a character voice desired by the user, and

wherein said voice synthesizer voice-synthesizes said translated voice-synthesis-subject data with said character voice.

Claim 35. (Original) The reading system as recited in claim 31,

wherein said voice-synthesis-subject data comprises music data having text data and musical score data, and

wherein said voice synthesizer voice-synthesizes said music data with said phonemic database.

Claim 36. (Original) The reading system as recited in claim 31, wherein said voice synthesizer voice-synthesizes a certain character string in said voice-synthesis-subject data with other phonetic voice than character voice specified by the user.

Claim 37. (Original) The reading system as recited in claim 31, wherein said voice synthesizer voice-synthesizes said voice-synthesis-subject data and a sound implying that phonetic sound being output is synthesized sound, said voice synthesizer inserting said sound in said voice-synthesis-subject data.

Claim 38. (Original) The reading system as recited in claim 31, wherein said server device further comprises a download selector enabling a user to download a part of said voice-synthesis-subject data desired by the user into said terminal device.

Claim 39. (Current Amended) An information terminal comprising:

a voice output processor for converting digital sound data into analog sound data, and for outputting said data to a speaker after removing an undesired noise from said data;

an operation unit for a user to input a command; and

a system controller for transferring, to a server device, a phonemic database and text data selected by the user through said operation unit, said phonemic ~~data~~database being constructed of sampled data of natural voice ~~taken~~ from real human,

wherein said server device voice-synthesizes said selected text data to synthesize data with said phonemic ~~data~~database specified by the user, and

wherein said voice output processor outputs said synthesized ~~text~~ data transferred from said server device over a network.